depositing a nitride layer; and

introducing oxygen into generally all of said nitride layer within said memory cell.

5. A method for improving the charge retention in a nitride layer of a memory cell, said method comprising:

depositing a nitride layer;

controlling the thickness of said deposited nitride layer; and

introducing oxygen into generally all of said nitride layer within said memory cell.--

Kindly add the following new claims:

--7. A method of manufacturing a programmable, read only memory device, the method comprising:

forming a first oxide layer on a substrate,

forming a nitride layer on top of said oxide layer, wherein said nitride layer is 100 angstroms or less thick;

introducing oxygen into generally all of said nitride layer within a memory cell during formation of a second oxide layer on top of said nitride layer;

patterning said oxide-nitride-oxide (ONO) layers into desired patterns; and

forming a gate layer over said patterned ONO layer.

8. A method according to claim 7 and wherein said first oxide layer is approximately 50 – 150 angstroms thick.

9. A method according to claim 7 and wherein said first oxide layer is approximately 80 angstroms thick.

10. A method according to claim 7 and wherein said nitride layer is approximately 20 – 150 angstroms thick.

11. A method according to claim 7 and wherein said second oxide layer is approximately 50 - 150 angstroms thick.

12. A method according to claim 7 and wherein said forming said second oxide layer comprises consuming a portion of said nitride layer.

13. A programmable, read only memory device comprising:

two diffusion areas in a substrate and a channel formed therebetween;

an ONO layer at least over said channel comprising:

a first oxide layer;

a substantially oxygenated nitride layer having a thickness of 100 angstroms or less overlaying said first oxide layer; and

a second oxide layer overlaying said nitride layer,

said first and second oxide layers having a thickness that is the same order of magnitude as said nitride layer; and

a gate at least above said ONO layer.--